

### **Remarks**

Claims 1-54 are currently pending. In the Office Action mailed March 18, 2003, the Examiner rejected claims 1, 18, 22, 29 under 35 U.S.C. 112. The Examiner rejected claims 1-6, 9-44 and 46-54 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,317,686 ("Ran"). The Examiner rejected claims 7, 8, 29-42 and 45 under 35 U.S.C. 103(a) as being unpatentable over Ran in view of U.S. Patent No. 5,911,775 ("Tanimoto").

#### **1. Response to §112 Rejection of Claims 1, 18, 22 and 29**

The Examiner rejected claims 1, 18, 22 and 29 under 35 U.S.C. 112. Applicant has amended claim 22 to provide antecedent basis. Applicant has additionally amended claims 1, 5, 18, 21, 29, 38 and 41 to clarify the language used in the claims. Therefore, Applicant respectfully requests the Examiner to withdraw this objection.

Applicant notes that in making this rejection the Examiner states that claims 1 and 29 are incomplete for omitting essential steps, such omission amounting to a gap between the steps. In claim 1 the Examiner alleges the omitted step is predicting future locations of a moving object. In claim 29 the Examiner alleges that the missing step is what happens after the step of calculating a difference between the anticipated location and the second location is performed in order to complete the method of creating and updating a trajectory of the moving object.

Applicant disagrees with the Examiner's contention that the omitted elements are essential to the invention. As described in MPEP 2172.01, "[a] claim which omits matter disclosed to be essential to the invention as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling." (emphasis added). This section further describes that "[i]n addition, a claim which fails to interrelate

essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention.” (emphasis added).

Applicant has not made any statements in the specification or otherwise of record that describe any particular matter as essential to the invention nor has the Examiner cited to any particular portion of the specification or record that would support his contention that the omitted elements are essential to the invention. Accordingly, the Examiner has not made any showing that the omitted elements are essential to the invention. Therefore, while Applicant has amended claims 1 and 29 to clarify the language used in the claims, these amendments should not be construed as an admission that any particular matter added or changed in the claims is essential to the invention.

## 2. Response to Rejection of Independent Claims

### a. 103(a) Rejection Over Ran

The Examiner rejected independent claims 1, 18, 29, 38, 43, 50 and 51 under 35 U.S.C. 103(a) as being unpatentable over Ran. In making this rejection, the Examiner affirmatively states that “Ran does not explicitly disclose the predicting future locations of a moving object.” (OA, pg. 4). The Examiner then states that it would be obvious to modify Ran to use an itinerary disclosed in Ran in order to predict future locations. Applicant asserts, however, that the Examiner has failed to make a *prima facie* case of obviousness because this proposed modification of Ran is impermissible.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP §2143; *In re Royka*, 490 F.2d 981 (CCPA

1974). In this case, while Ran does not include all the limitations of the independent claims, the Examiner asserts that it would have been obvious to modify Ran in such a way as to obtain the claimed invention. Applicant notes that to the extent that the Examiner's rejection and proposed modification is directed toward a limitation that the Examiner alleges is essential rather than one that is in the pending claims, any such rejection would be improper. As previously described, these limitations are not actually essential and would not need to be included in any pending claims. Nevertheless, the discussion herein would also apply to any proposed modification of Ran to include computing a trajectory for predicting future locations of a moving object, as is claimed by Applicant.

The Examiner is respectfully reminded that the "mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritsch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992). Therefore, regardless of whether Ran can be modified in the manner asserted by the Examiner, Ran itself must suggest the desirability of the modification. In this case, the Examiner modifies Ran to add missing limitations. However, the Examiner does not point to any passage in Ran or otherwise show how Ran would suggest the desirability of the modification.

Ran is directed toward a method of providing travel times along route segments. As described in Ran, information (e.g., vehicle type, driver specific disposition, weather, etc...) can be inputted into an equation that is then used to predict travel time over a particular route segment. (Ran Abstract). Ran does not teach or suggest, however, constructing a trajectory that can be used to predict future locations of a moving object, as is claimed in Applicant's

independent claims. As Ran does not include this limitation, it also does not suggest the desirability of any modification to include this limitation.

For these reasons, Applicant's submit that the Examiner has failed to make a prima facie case of obviousness, and independent claims 1, 18, 29, 38, 43, 50 and 51 are allowable. Dependent claims 2-17, 19-28, 30-37, 39-42, 44-49 and 52-54 are therefore also allowable.

**b. 103 Rejection Over Ran in View of Tanimoto**

The Examiner further rejected independent claims 29 and 38 under 35 U.S.C. as being unpatentable over Ran in further view of Tanimoto. In making this rejection, the Examiner states that Ran discloses the claimed invention as previously discussed except the step of recomputing the path when an error reaches a threshold. The Examiner then turns to Tanimoto in order to find this missing limitation. Tanimoto, however, does not make up for the other deficiencies of Ran. As neither reference teaches or suggests computing a trajectory used in determining future locations of a moving object, the Examiner has again failed to make a prima facie case of obviousness because the proposed combination of Ran and Tanimoto continues to rely on the impermissible modification of Ran.

The Examiner further fails to show any suggestion or motivation, either in the two references or in the knowledge available to one of ordinary skill in the art at the time the invention was made, to combine Ran and Tanimoto in the manner asserted by the Examiner. Ran deals with providing travel times for route segments, while Tanimoto deals with helping a vehicle return to a guided route after the vehicle has deviated from that guided route. As getting a vehicle back on a guided path would seemingly not be helpful in computing route segment travel times, and vice versa, there appears to be no motivation to combine these references.

Rather than specifically stating any reasons for combining one reference dealing with computing travel times with another reference dealing aiding a vehicle when it deviates from a guided route, the Examiner simply listed the advantages that would result after the cited references were combined. This is impermissible hindsight, as "the references must be viewed without the benefit of hindsight vision afforded by the claimed invention." *Holdosh v. Block Drug Co.* 786 F.2d 1136, 1143 (Fed. Cir. 1986). Therefore, as the Examiner has not shown any teaching in the references themselves to make the proposed combination, the Examiner has failed to make a prima facie case of obviousness.

For these reasons, independent claims 1, 18, 29, 38, 43, 50 and 51 are allowable.  
Dependent claims 2-17, 19-28, 30-37, 39-42, 44-49 and 52-54 are therefore also allowable.

### 3. Conclusion

In light of the above remarks, the Applicant submits that the present application is in condition for allowance and respectfully request notice to this effect. The Examiner is requested to contact the Applicants' attorney, Brian Harris, at his direct dial number (312-913-3303) if any questions arise or he may be of assistance to the Examiner.

Respectfully submitted,

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